

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001213**Date Inspected:** 24-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** OBG 6CE, OBG 6BW, OBG 7AE, Miscellaneous**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

**OBG 6CE**

Base metal surfaces of the Internal Floor area "T Stiffeners of the Side Plates and Bottom Plate were abrasive blasted and rejected due to non-compliance with SSPC SP-10. Visible rust was viewed on the stiffeners and Longitudinal Diaphragms. A series of 4 more inspections were requested and performed prior to compliance with SSPC SP-10 and Interzinc 22 was applied.

**OBG 6BW**

ZPMC cleaning and performing repairs to internal surfaces and also applying Interzinc 22 to areas of low Dry Film Thickness (DFT) prior to calling for inspection.

**OBG 7AE**

Internal base metal surfaces of the Bottom and Side Plates "T" stiffeners were abrasive blasted for VT inspection and amendment of gouges and burrs and grinding was performed. Caltrans QA Tim McClendon performed VT inspection and mapped accordingly.

**Miscellaneous Metal**

Base Metal surfaces of 71 Splice plates were de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting.

**OBG 6BW**

Testing of applied undercoat the DFT of the internal surfaces were discovered to have areas of non-compliance

---

## SOURCE INSPECTION REPORT

( Continued Page 2 of 2 )

---

and were found to be low and require additional film build. External adhesion testing was performed and of the 6 tests performed one test area Failed and a retest was requested in the adjacent area, also the other 5 tests were of passing values but the values all were quite low in comparison to previous tests. Additional dollies were affixed to all areas adjacent to previous test areas. All tests performed on this date revealed 100% failure from the substrate with little or no cohesive breakdown of the applied undercoat.

OBG 6CE

Internal base metal surfaces were inspected for compliance with SSPC SP-10 from Panel Points 45, 46, & 47 to the End Weld Seam. Grinding of fabrication defects and gouges and sharp edges was required and additional abrasive blasting of non-compliant areas prior to application of Interzinc 22. Bottom Plate and Side Plate "T" stiffener areas were inspected at this time, 4 additional inspections were subsequently performed until base metal surfaces were in compliance with SSPC SP-10 condition and Interzinc 22 then applied.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

### Summary of Conversations:

No relevant conversations on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, (858) 699-7549, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Lumley, James	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon, Albert	QA Reviewer

---